PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

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Application Number | 10/526-500

d TRACE	Application Number	10/536,699				
TRANSMITTAL	Filing Date	May 27, 2005				
FORM	First Named Inventor	Reinhold Koch				
	Art Unit	2819	19			
(to be used for all correspondence after initial filing)	Examiner Name	Unknown				
Total Number of Pages in This Submission 88 w/o this sheet	Attorney Docket Number	3007990-0001-PC	r-us			
ENC	LOSURES (Check all	that apply)				
Fee Attached  Amendment/Reply  After Final  Preliminary  Extension of Time Request  Express Abandonment Request	Drawing(s)  Licensing-related Papers  Petition  Petition to Convert to a Provisional Application Power of Attorney, Revocation Change of Correspondence A Terminal Disclaimer  Request for Refund  CD, Number of CD(s)  Landscape Table on CD  rks	Address  Status Letter  Other Enclosure(s) (plubelow):  (1) Foreign Patent Reference  (2) Non-Patent Reserve Co.		n to Board ences n to TC pply Brief) ease Identify ferences		
Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53	DNEY OR AC	CAIT	<u></u>			
Firm Name SIGNATURE C	OF APPLICANT, ATTO	KNET, OK AG	ENI			
SCHNADER, HARRISON, SEGAL	& LEWIS, LLP					
Signature . To cere >	Key					
Printed name JOAN T. KLUGER						
Date 5///06		Reg. No. 38,94	0			
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I hereby certify that this correspondence is being facs sufficient postage as first class mail in an envelope act the date shown below:  Signature	imile transmitted to the USPT ddressed to: Commissioner for	O or deposited with Patents, P.O. Bo	th the Uni	ited State Nexandria	s Posta a, VA 2	al Service with 2313-1450 on
Typed or printed name DEANNA M. MCGREGOR	₹ /	0	Date	2	ン	04
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I nis collection or information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



## THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit

: 2819

Examiner

: Unknown

22469

Serial No.

: 10/536,699

Filed

: May 27, 2005

Inventors

: Koch, et al.

Title

: MAGNETIC LOGIC DEVICE

Confirmation No.: 9291

Docket No.: 3007990-0001-PCT-US

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

We submit herewith the Forms PTO/SB/08a and PTO/SB/08b. They are submitted to comply with the Applicants' duty of disclosure under 37 C.F.R. §1.56 and are believed related to this application.

We are submitting this in the spirit of voluntary disclosure.

It is accordingly requested that the Information Disclosure Statement be officially entered in the file of this case and that appropriate notification be made that it was considered in the prosecution of the case.

Respectfully submitted,

SCHNADER HARRISON SEGAL & LEWIS LLP

Dated: 5/1/04

By:

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Attorneys for Applicants

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Complete if Known titute for form 1449A/PTO Application Number 10/536,699 INEORMATION DISCLOSURE Filing Date May 27, 2005 STATEMENT BY APPLICANT First Named Inventor Reinhold Koch Art Unit 2819 (Use as many sheets as necessary) **Examiner Name** 2 Attorney Docket Number 3007990-0001-PCT-US of

				U.S. PATENT D	OCUMENTS	
Examiner Initials'	Cite No. <sup>1</sup>	Document Numb Number-Kind Code <sup>2</sup> (if kr		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 5,629,549		05-13-1997	Johnson	
		US- 6,140,838		10-31-2000	Johnson	
		US- 2001-0026158	A1	10-04-2001	Ohno, et al.	
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FOREIGN PATENT DOCUMENTS								
Examiner Initials'	Cite No.1	Foreign Patent Document  Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>3</sup> (ii known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>		
		DE 100 36 356 C2 (with English summary)	03-14-2002	Institut fur Physikalische Hochtechnologie e.V.				
		DE 100 53 206 C1 (with English abstract)	01-17-2002	Siemens AG				
		DE 101 44 395 C1 (with English summary)	10-10-2002	Siemens AG				

Examiner	Date	
Signature	Considered	

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Substitute for form 1449B/PTO  INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (Use as many sheets as necessary)				Complete if Known			
				Application Number	10/536,699		
			SURF	Filing Date	May 27, 2005		
				First Named Inventor	Reinhold Koch		
			SMINI	Art Unit	2819		
			y)	Examiner Name			
Sheet 2 of 2		Attorney Docket Number	3007990-0001-PCT-US				

NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²				
		"XMR-Technologien: Magnetoelektrik, Sensorik," "XMR Technologies" Technology Analysis: Magnetism, vol. 2, VDI Technology Center "Physical Technologies," Düsseldorf, Germany, 1997, pps. 11 – 46 (with English abstract)					
		W.C. BLACK, et al., "Programmable logic using glant-magnetoresistance and spin-dependent tunneling devices (invited)," <i>Journal of Applied Physics</i> , vol. 87, 2000, pps. 6674-6679					
······································		A. T. HANBICKI, et al., Nonvolatile reprogrammable logic elements using bybrid resonant tunneling diode-giant magnetoresistance circuits," <i>Applied Physics Letters</i> , 2001, vol. 79, no. 8, pps 1190 - 1192					
		T. GERRITS, et al., "Ultrafast precessional magnetization reversal by picosecond magnetic field pulse shaping," <i>Nature</i> , vol. 418, 2002, pps – 509 - 512					
		R. RICHTER, et al., "Field programmable spin-logic realized with tunneling-magnetoresistance devices," <i>Solid State Electronics</i> , Elsevier Science Publishers, Barking, GB, 2002, Vol. 46, No. 5, pps. 639 - 643					
		A. NEY, et al., "Programmable Computing with a single magnetoresistive element," <i>Nature</i> , No. 425, 2003, pps 485 – 487					
	:  -  -	R. RICHTER, et al., "Tunneling systems for field programmable spin-logic gates," Journal of Applied Physics, 2002, vol. 91, No. 10, pps 8402 - 8404					
	į	R. RICHTER, et al., "Nonvolatile field programmable spin-logic for reconfigurable computing," <i>Applied Physics Letters</i> , 2002, vol. 80, No. 7, pps 1291 - 1293					
		R. RICHTER, et al., "Field programmable spin-logic based on magnetic tunneling elements," <i>Journal of Magnetism and Magnetic Materials</i> , 2002, Elsevier, vol. 240, no. 1 – 3, pps. 127 - 129					

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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.